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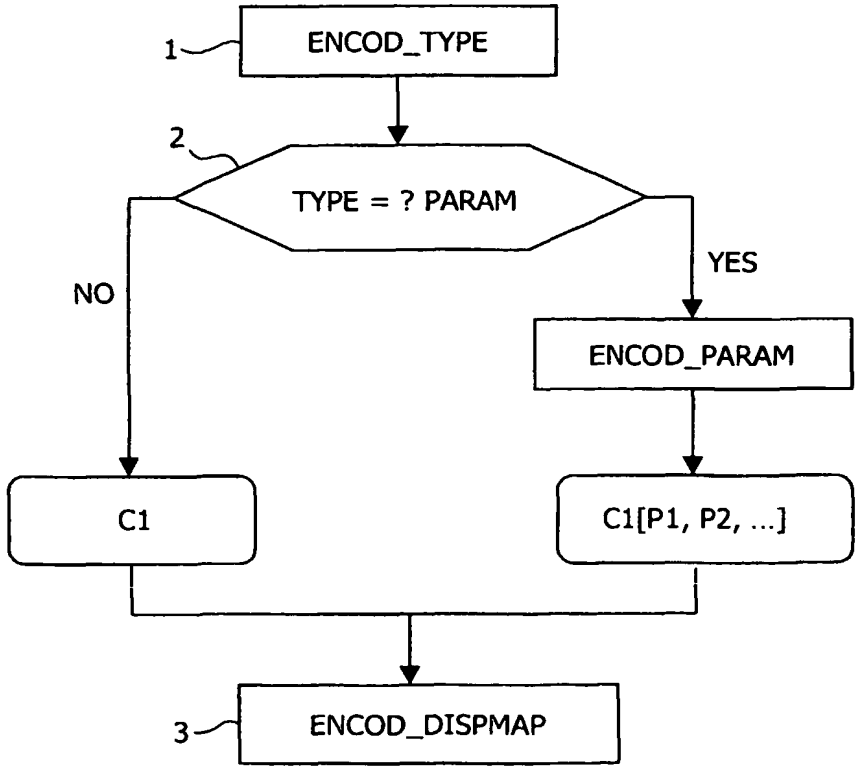
(54) Title: METHOD AND APPARATUS FOR ENCODING A DIGITAL VIDEO SIGNAL



(57) Abstract: The present invention relates to a method and an encoder for encoding a digital video sequence, said digital video sequence comprising some sets of images including a disparity map, said disparity map being used to reconstruct one image of a set of images from another image of said set of images. The method is characterized in that it comprises the steps of:- encoding a type of a disparity map to be used for the reconstruction of an image, and- encoding the disparity map.Use: encoder in a video communication system

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SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04N13/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	NAITO S ET AL: "Advanced rate control technologies for 3D-HDTV digital coding based on MPEG-2 multi-view profile" IMAGE PROCESSING, 1999. ICIP 99. PROCEEDINGS. 1999 INTERNATIONAL CONFERENCE ON KOBE, JAPAN 24-28 OCT. 1999, PISCATAWAY, NJ, USA,IEEE, US, 24 October 1999 (1999-10-24), pages 281-285, XP010369123 ISBN: 0-7803-5467-2 Par 3. GOP structures fro Multi-view coding Par 4. Discriminatory bit allocation --- -/--	1-7

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	De Paepe, W

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01 01348 A (DYNAMIC DIGITAL DEPTH RES PTY ;HARMAN PHILIP VICTOR (AU); MILLIN A) 4 January 2001 (2001-01-04) page 1, line 1 - line 23 page 5, line 1 - line 14 ---	1-7
A	US 6 055 012 A (HASKELL BARIN GEOFFRY ET AL) 25 April 2000 (2000-04-25) the whole document ---	1-7
A	PANIS S ET AL: "The use of stereo and motion in a generic object-based coder" SIGNAL PROCESSING. IMAGE COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 9, no. 3, 1 March 1997 (1997-03-01), pages 221-238, XP004057103 ISSN: 0923-5965 the whole document -----	1-7

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0101348 A	04-01-2001	WO 0101348 A1	04-01-2001
		AU 5202700 A	31-01-2001
US 6055012 A	25-04-2000	NONE	